

Integration of Technology for Distance Learning Classes

The Teacher's Role in Successful Distance Learning Education Programs

The bulk of attention given telecommunicated distance education today is classroom-focused. Although the Internet and the World Wide Web—with their accompanying bulletin boards, email services, and ubiquitous databases of text, images, sound, and motion files—are continually growing in number. The thought of a “master” instructor speaking to and interacting with students in remote locations simultaneously is the present model for most distance learning programs.

Success of classroom-focused distance learning programs is ultimately dependent on the manner and quality of instruction delivered. From the U.S. Office of Technology Assessment's landmark study, *Linking for Learning: A New Course for Education*, the following findings are noted as successful practices of ongoing classroom-focused distance education programs (United States Congress, 1989, pp 87-88):

- **The key to success in distance learning is the teacher.** If the teacher on the system makes an effort at learning the techniques of integration of distance learning technology, the technology itself can become almost transparent. Conversely, no technology can overcome poor teaching; poor teaching is actually exacerbated in distance education applications. But when skilled teachers are involved, creative use of the media can enrich students beyond the four walls of their home classroom. Outstanding teaching can also serve as “electronic mentors” to other teachers.
- **Teachers using distance learning have had to find new ways to structure student-teacher interaction.** Old styles of teaching may not be appropriate or effective. The inherent limitations in distance learning technologies can be catalysts for instructions design and teaching techniques that enhance the learning process.
- **Teachers must be trained if they are to use distance learning technologies effectively.** Training opportunities, however, remain limited. Few preservice and inservice programs focus on how to incorporate technology into instruction, create new opportunities for interactivity, or develop materials and use the media most effectively.
- **Distance teaching is not for everyone.** For some, nothing can substitute for the intimacy of the classroom. Those who serve as distance learning teachers report that it takes more time to prepare for class sessions and more effort to compensate for the separation from their students. They must be more organized. Being on stage at all times can be intimidating. But distance teachers are excited about the opportunity to be innovators, to teach the subjects they love to a wider audience of students, and to use technology as a springboard to creativity.
- **Classroom facilitators matter.** How they work with the distance teacher shapes the style of instruction and affects the success of the effort.

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Instructional Elements of Successful Distance Learning Programs

Distance education instructors of necessity must be master teachers. They must understand and model principles from the literature on effective teaching and know how to best use technology to convey their teaching. Teachers must possess a “presence” that capitalizes on the use of television as a teaching medium. In this respect, much can be learned from broadcast journalism—that is, noting how TV anchors look directly into the camera, are precise and articulate in their selection of words, and support their presentations with a high level of visual content (Barker and Dickson, 1994).

Distance teaching pedagogy also requires “forced” interaction between teacher and students, a slower pace of instruction, and clear logical presentations. The teacher needs to ask a lot of questions to ascertain if students understand and to keep them actively involved in the instructional process. Additional suggestions which distance education teachers might consider to more actively involve students at remote sites in the learning process and make them feel part of the class include (United States Congress, 1989):

- Meet in person with students in each of the distant classes early in the course.
- Arrange for all the students to meet at least once, ideally at the beginning of a class.
- Have telephone office hours when students can call and discuss the lessons with the teacher or with teaching assistants.
- Set up assignments onsite for students to handle as members of learning groups.

Telecommunicated distance learning technologies, specifically TV instruction, have a relatively short history beginning in the late 1950s and early 1960s with one-way passive viewing of educational broadcast television. Since that early beginning, we have seen the implementation of ITFS, cable television, and microwave integrated with audio talk-back for interaction. In the mid-1980s, we saw the advent of interactive satellite permitting one-way video, two-way audio interaction. And in the late 1980s and early 1990s, we’ve witnessed increased use of two-way video and two-way audio, either over fiber optic connections or compressed television. Each iteration of televised and telecommunicated instruction has seen an increased capability of interaction between the TV instructor and remote-site students.

Distance learning facilitates high performance education by encouraging new instructional techniques and by allowing electronic access to information from any location. It is a driving force in the restructuring efforts of American education. the restructured school must bring these resources to the classroom and substantially supplement or replace the dated, noninteractive material used today if we are to implement Goals 2000.